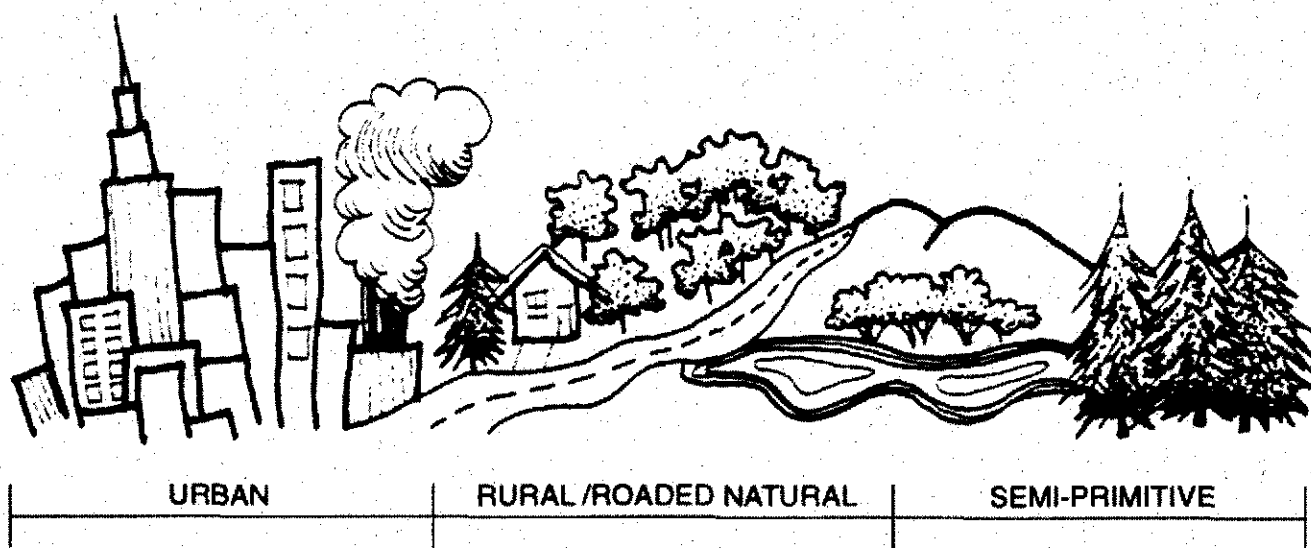




## CHAPTER 2

# RECREATION OPPORTUNITY SPECTRUM: A VEHICLE TO TRAIL LAYOUT AND CONSTRUCTION





## BACKGROUND

The great outdoors offers a tremendous diversity of recreational opportunities. Equally diverse are the public's recreational interests and needs. From city parks to pristine wilderness, people look to the outdoors to satisfy their interests, challenge their abilities, and meet their expectations of a particular activity and setting. Recreation researchers have long recognized the importance of the relationship between expectations and actual settings. Many have suggested that managers should provide a range of opportunities to best serve the diversity of public expectations (Clark and Stanley, 1979).

To serve as a framework for assessing, planning, and managing recreation resources, the USDA-Forest Service developed the **Recreation Opportunity Spectrum (ROS)**, in accordance with the Forest and Rangeland Renewable Resources Planning Act of 1974 (PL 93-378), amended by the National Forest Management Act of 1976 (PL 94-588). ROS allows accurate stratification and definition for classes of outdoor recreation environments. It can be applied to all lands, regardless of ownership or jurisdiction (USDA-Forest Service 1982).

Since the time of its development, the use of ROS has spread among different agencies and groups. The following federal legislation, which requires consideration for accessibility by people with disabilities, documents acceptance of a system such as ROS: *Architectural Barriers Act of 1968*, *Rehabilitation Act of 1973*, and *Americans With Disabilities Act of 1990 (ADA)*. A logical step for the Ice Age NST's *Handbook for Trail Design, Construction, and Maintenance* is to follow ROS. Doing so demonstrates responsiveness to accessibility (depending on the trail setting) and provides a template for determining the degree of trail development needed.

## ROS EXPLAINED

The USDA-Forest Service ROS divides recreation settings into six broad categories which, at times, overlap—urban, rural, roaded natural, semi-primitive motorized, semi-primitive non-motorized, and primitive. In the interest of simplicity and considering the nature of the Ice Age NST, these are combined into three categories. The recreation settings used throughout the remainder of this handbook are: urban, rural/roaded natural, and semi-primitive.

Many people associated with the Ice Age NST tend to think of and manage the trail as if it were semi-primitive throughout when, in fact, the surrounding land does not correspond to this level of management. The setting through which the majority of the Ice Age NST passes is rural/roaded natural. Depending on the environmental setting, a specific segment may be a different ROS setting than the grosser classifications.

There may be a few special cases where the trail does not fit easily into one of the three categories, such as a trail located in an urban area that follows a natural feature such as a drumlin or esker. In determining standards for situations like these, be mindful of who the users are and the amount of use that is expected or desired. If in doubt, trail chapters should contact their IAPTF regional field coordinator or the National Park Service. The following is a description of each setting:

► **Urban** settings are characterized by substantially urbanized and modified natural environments. Large numbers of people may be present, both on-site and in adjoining areas. Sights and sounds of people are predominant and experiencing contact with individuals and



groups is high. Although sites may appear natural, vegetation is often manicured. Facilities for highly intensive motor vehicle use, parking, and mass transit are often available.

Opportunities for competitive and spectator sports, and for passive use of highly human-influenced parks and open spaces are common. Experiencing natural environments, having challenges and risks associated with the natural environment, and using outdoor skills are rare. Sections of the Ice Age NST that follow sidewalks through towns or pass through highly developed linear parkways are described as urban.

Since the trail passes through a number of picturesque small towns or medium-sized cities, particularly in southern Wisconsin, there are a number of segments that fit within the urban category. For example, the trail follows sidewalks through Slinger and Lodi, and highly developed parkways through Janesville and Hartland. The trail also follows greenway systems through a number of cities and regional parks such as those portions through St. Croix Falls, Verona, and Dane County's Ice Age Trail Junction Area. The ROS classification for these greenway systems is probably a blend of the urban and rural/roaded natural setting.

► **Rural/Roaded Natural** settings are characterized by a more natural-appearing environment with moderate evidence of human activity. Resource modification and utilization practices are evident but harmonious with the natural environment. Conventional motor vehicle use is common on paved, graveled, and unsurfaced roads. Interaction between users is low to moderate. Hikers have an approximately equal chance of experiencing contact with other user groups or experiencing isolation from the sights and sounds of humans. Recreation opportunities provide low to moderate challenge and risk. Practice and testing of outdoor skills are suitable in this setting.

As mentioned, most of the Ice Age NST passes through this combined ROS setting. The rural setting has been combined with the roaded natural setting for simplicity because their standards for trail construction are the same. However, there are distinct differences between the two landscapes. Generally, flat and rolling farmland and pastoral settings are *rural*. Evidence of human activity (e.g., hay bales, plowed fields, farmhouses, and frequent road crossings) is present. A degree of isolation is experienced when the trail passes through the isolated woodlots interspersed throughout the landscape. Examples of rural ROS are the farmlands of southern, southcentral and northwestern Wisconsin and suburban developments around cities.

In contrast, *roaded natural* settings are more typical of the predominantly forested areas in northern Wisconsin on county and state forest properties. Most of the public and private forests in Lincoln, Langlade, Taylor, Chippewa, Rusk, Barron, Burnett, Washburn, and Polk Counties fall into this setting.

► **Semi-Primitive** settings are predominantly natural environments of moderate to large size. The area is managed in such a way that the on-site controls and restrictions present are subtle. Motor vehicle use may be prohibited in some semi-primitive areas. Timber harvesting is often present but harvest intensity and schedules are modified. Size of cut areas is smaller, timber harvest may be restricted to once per 20-25 years rather than the normal 10 years, access roads are less developed and farther apart, etc.



There is a moderate to high probability of isolation from the sights and sounds of humans. Opportunities exist for self-reliance through the application of outdoor skills in a setting that offers a high degree of interaction with the natural environment.

The Ice Age NST has just a few areas that can be described as semi-primitive. Sections of the Ice Age NST corridor that are located within the Chequamegon National Forest in Taylor County are formally designated as semi-primitive. Segments of the Ice Age NST located immediately east of the National Forest in Taylor County and further east into Lincoln County and the New Wood State Wildlife Area could also be described as a semi-primitive setting.

Whether or not an area is semi-primitive is often a judgment call based on factors such as acreage of undeveloped area, road density, degree of timber management, the intensity of sounds and sighting of traffic, or development observed from the trail.

The following criteria may help determine if the lands in question are managed as formally designated areas and distinguish them from the more typical forested (roaded natural) areas:

- ▶ The area has a definable boundary (roads, streams, etc.).
- ▶ The area has at least 2,500 contiguous acres.
- ▶ Road densities are low—averaging one mile per square mile.
- ▶ The area is generally under one ownership or, if multi-ownership, there is management commitment that the area will be managed as a unit.
- ▶ Timber management is of low intensity and frequency. Evidence of management activities is relatively low, consisting of scattered, small, recently regenerated stands.
- ▶ Low standard roads—often gated at the periphery of the area.
- ▶ There is low interaction between users in a predominantly natural or natural appearing environment.
- ▶ Boat and canoe access is generally over trails of varying lengths. Normally, boats and canoes are carried in from the periphery of the area. Some interior lakes may not have developed access.
- ▶ Recreation is low key, light-on-the-land in nature and generally dispersed. Low impact activities such as hiking, hunting, cross-country skiing, etc., are emphasized. Campsites are dispersed and primitive in nature. Highly developed bicycle or ORV trails are not allowed, but some areas may allow for occasional motorized use.
- ▶ There is owner/manager commitment for this type of management.